

REMARKS

Re-examination and reconsideration of the subject matter identified in caption, pursuant to and consistent with 37 C.F.R. §1.111, and in light of the remarks which follow, are respectfully requested.

Initially, it is respectfully noted that Japanese Patent Document No. 2002-229251 listed on form PTO-1449 submitted with the Information Disclosure Statement filed March 29, 2004 has not been initialed. Applicants respectfully request issuance of a supplemental Examiner-initialed form PTO-1449. A copy of the PTO-1449 form is attached.

Applicants acknowledge with appreciation the indication that claim 2 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-19 remain pending in this application with claims.

Claims 1 and 3-19 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Published Patent Application No. 2002/0039699 (Nishimori et al) in view of U.S. Published Patent Application No. 2004-01373571 (Bartel et al) and U.S. Patent No. 6,541,173 (Kido et al) for the reasons set forth in paragraph (2) of the Office Action. Reconsideration and withdrawal of these rejections are requested for at least the following reasons.

Claim 1 is directed to a toner comprising a core layer and a shell layer formed on the core layer where the core layer contains a first wax and the shell layer contains a second wax. The second wax has a higher melting point than the first wax, the first wax has an average dispersion diameter smaller than that of the second wax, and the content of the first wax in the core layer is greater than the content of the second wax in the shell layer. These parameters are important in order to achieve the objectives and advantages of the present invention.

With reference to Table 2 on page 53 of the specification, Comparative Examples 5 and 6 are directed to toners where the second wax does not have a higher melting point than the first wax. Comparative Examples 1 and 4 disclose toners where the first wax does not have a smaller average dispersion diameter than the second wax. Comparative Examples 2 and 3 are directed to toners where the content of the first wax in the core layer is less than the content of the second wax in the shell layer. A review of the properties of the respective toners in Table 3 on page 69 shows that the parameters set forth in claim 1 provide toners with superior characteristics in comparison to toners where one or more of the specified parameters are missing.

The cited combination of references fails to disclose or suggest toners as claimed herein. Nishimori et al '699 discloses a toner having a core/shell structure. However, this document does not clearly show a toner having a wax in the core and in the shell. Applicants acknowledge the disclosure in paragraph [0155] that the methods of paragraphs [0151]-[0154] can be combined. The Example does not disclose a toner with a wax in the core and in the shell. Moreover, there is no disclosure concerning the relationship of the melting point between the first wax and the second wax, relationship of the average dispersion diameter between the first wax and the second wax, and that the first wax has a content in the core layer that is greater than the content of the second wax in the shell layer.

Kido et al '173 discloses a toner having two kinds of waxes but the toner does not have a core/shell structure. In addition, this document discloses preparing the toner by a pulverizing method in which two kinds of waxes are melted and kneaded simultaneously. There is no disclosure of controlling dispersion conditions in a core and shell. This reference does not disclose anything concerning the relationship of the melting point between the first wax and the second wax, the relationship of average dispersion diameter between the first

wax and the second wax, and that the first wax has a content in the core layer that is greater than the content of the second wax in the shell layer.

Bartel et al '357 discloses a toner having a core/shell structure and containing two kinds of waxes. However, there is no disclosure that both core and shell contain waxes. In the Example, a toner is disclosed in which plural waxes are contained in the core (V, VI). There is no disclosure concerning the relationship of average dispersion diameter and that the first wax has a content in the core layer that is greater than the content of the second wax in the shell layer.

Accordingly, there is no recognition in the cited references that the relationship of the melting points, average dispersion diameters and content of the waxes in the core and shell are significant in obtaining a toner having excellent low-fixing temperature properties, excellent anti-offsetting properties, excellent anti-breaking properties and excellent anti-flocking properties. The comparative data in the present specification, as discussed above, shows that a toner of a core/shell structure having a wax in each of the core and shell and where the waxes have the relationships set forth in claims 1 and 13, has superior properties to a toner which does not meet the specified features of the claims.

In view of the above, the §103 rejection over Nishimori et al '699, Bartel et al '571 and Kido et al '173 should be reconsidered and withdrawn. Such action is earnestly solicited.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

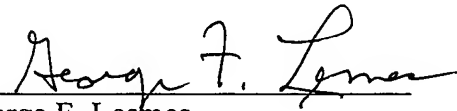
questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at his earliest convenience.

Respectfully submitted,

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